UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,134	03/30/2006	Jin Yokoyama	NS-US065281	5661

22919 7590 08/15/2008

GLOBAL IP COUNSELORS, LLP
1233 20TH STREET, NW, SUITE 700
WASHINGTON, DC 20036-2680

EXAMINER	
GIMIE, MAHMOUD	
ART UNIT	PAPER NUMBER
3747	
MAIL DATE	DELIVERY MODE
08/15/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/574,134	YOKOYAMA ET AL.	
	Examiner	Art Unit	
	Mahmoud Gimie	3747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 11-15* is/are rejected.

7)☒ Claim(s) *4-10 and 16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 June 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 12-15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claims 12-15 recites the limitation "the control for suppressing the occurrence of smoke" in lines 1-2. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Goto (US 6,173,697) or Takaku et al. (US 4,779,597).

Goto discloses a fail-safe control method for an internal combustion engine, comprising: determining when a throttle valve in an intake system of the internal combustion engine is stuck in a fixed position (specified abnormality detected by section 1B, col. 3 and ll. 3-10); controlling a throttle aperture to maintain the aperture in the fixed position (to a

certain small opening, col. 3 and ll. 19-27); and operating a fail-safe control (1A) to ensure a pre-described torque in the engine.

Regarding claim 2, and further comprising: performing recovery diagnostics while control is being performed, to determine whether the fixed state of the throttle valve was released (1C).

Regarding claim 3, the invention further comprising: increasing the aperture of the throttle valve when the amount of fuel injection is less than the prescribed amount (including zero); and determining whether the fixed state of the throttle valve has been released (1C) on increasing the throttle aperture.

Regarding claim 11, Goto discloses a fail-safe control device for an internal combustion engine, comprising: a throttle valve (2); a diagnostic for determining a position of the throttle valve (3); and a control to control the throttle aperture when the throttle valve is stuck in a fixed position (fail-safe control, section 1A).

6. Claims 1-3 and 11-12 are rejected under 35 U.S.C. 102 (b) as being anticipated by Takaku ET al. (US 4,779,597).

Takaku et al disclose a fail-safe control method for an internal combustion engine, comprising: determining when a throttle valve in an intake system of the internal combustion engine is stuck in a fixed position (figure 4); controlling a throttle aperture to maintain the aperture in the fixed position (stop throttle driving to keep throttle position at sticking position); and operating a fail-safe control (207) to ensure a pre-described torque in the engine.

Regarding claim 2, and further comprising: performing recovery diagnostics while control is being performed, to determine whether the fixed state of the throttle valve was released (checking flag THNGBA).

Regarding claim 3, the invention further comprising: increasing the aperture of the throttle valve when the amount of fuel injection (recovery fuel control, 303) is less than the prescribed amount (including zero); and determining whether the fixed state of the throttle valve has been released (THNGBA) on increasing the throttle aperture.

Regarding claim 11, Takaku et al. disclose a fail-safe control device for an internal combustion engine, comprising a throttle valve (3); a diagnostic for determining a position of the throttle valve (figure 4); and a control to control the throttle aperture when the throttle valve is stuck in a fixed position (figure 4).

Regarding claim 12, wherein a control for suppressing the occurrence of smoke further comprises a control to delay the fuel injection timing (injection period control, col. 4 and l. 21) more than when normal control is performed

7. Claims 1-3, 11, 12 and 15 rejected under 35 U.S.C. 102(e) as being anticipated by Fuwa (US 2004/0035391).

Fuwa discloses a fail-safe control (figures 19 and 20) method for an internal combustion engine, comprising: determining when a throttle valve in an intake system of the internal combustion engine is stuck in a fixed position (paragraph 0196); controlling a throttle aperture to maintain the aperture in the fixed position (S2017); and operating a fail-safe control (figures 19-20) to ensure a pre-described torque in the engine.

Regarding claims 2-3, 11 and 12, see figures 19-20.

Regarding claim 15, wherein a control for suppressing the occurrence of smoke further comprises a control that reduces or stops the EGR rate (paragraph 0087).

Allowable Subject Matter

8. Claims 4-10 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 13 and 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references disclose throttle valve control systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahmoud Gimie whose telephone number is 571-272-4841. The examiner can normally be reached on Monday-Friday between 7 a.m. -3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen K. Cronin can be reached on 571-272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MG/
/Mahmoud Gimie/
Primary Examiner, Art Unit 3747
.